



# **Production EAS And EAS Modernization Update**

**October 14, 2020**



# Overview

- EAS Production Update
  - Grantee Code Payments
  - Form 731 Validation for 6 GHz
  - EAS Webserver Performance Issues
- EAS Modernization Update
  - Background, FCC Approach, and Terms
  - Planned Phases of Process
  - Modernization Status, Summary and Conclusions
  - Modernization Work in Progress
- For Reference Only: Policy and System Change Summary From April 2020 TCBC Presentation



# Equipment Authorization Update

- Grantee Code Payments
  - Commission Registration System (CORES) update 9/4/2020
    - <https://www.fcc.gov/document/enhanced-payment-portal-public-notice>
  - Caused unexpected errors to EAS grantee payment by third party process - Issue resolved 10/8/2020
- Form 731 Validity Checks Update for 6 GHz devices
  - FCC 20-51 R&O and FNPRM added Part 15E operation in the frequency band 5925-7125 MHz. The Form 731 was modified (new equipment classes and new frequency band) to allow submissions for these devices
    - Note that PAG is required prior to grant
- EAS Webserver Performance
  - Increased activity since late August
    - More frequent performance issues since ~ 9/21/2020
  - Other possible causes also being investigated



# **Equipment Authorization Electronic Filing System (EAS) Modernization**



# Electronic Filing System Background Information

## ● Background Information

- Current system manages all entities, 731s and KDB
- Current system became operational April 15, 1998
  - KDB System became operational in 2005
- New system is a complete redesign of EAS database and user access interfaces
  - Existing EAS data will be migrated to new platform
  - Minor changes to how information is collected
  - Minor policy changes to accommodate EAS changes and allow FCC to better manage program
  - Look and feel very different
  - Individual user passwords





# EAS Modernization Approach

- Database and Website Modernization Plan
  - Review existing EAS processes with goal to improve and streamline
    - Resolve known EAS database problem areas
  - Ensure new EAS operations are in accordance with current rules, procedures and policies
  - Implement EAS changes to account for all equipment authorization policy and procedural changes not programmed into current system
  - Allow flexibility for potential future rule, procedure and policy changes
  - Implement FCC standardized login process



# EAS Modernization Terminology

- New EAS Platform is Service Now (SNOW)
  - Existing platform is Powerbuilder for internal users accessing a Sybase database
    - External access is webpage
  - New external user website is known as “Portal”
- New EAS Login and password is known as username and is an email address
- Commission Registration System (CORES)
  - Used to obtain and manage usernames
    - Operated by FCC Office of Managing Director (OMD) and not by OET
    - There is a separate help desk for CORES



# EAS Modernization Terminology II

- FCC Registration Number (FRN)
  - Ten Digit number assigned by CORES
  - Requirement for anyone doing business with the FCC to have FRN has existed since 2001
- “Entity” is a generic term for an organization managed in EAS and includes:
  - Grantee
  - Telecommunication Certification Body (TCB)
  - TCB Designating Authority (TDA)
  - TCB Accrediting Body (TCBA)
  - Test Firm Accrediting Body (TFAB)
  - Accredited Test Firm
- Non-Authenticated user is a user without login/password
  - Access limited to publicly available information





# EAS Modernization – Initial Release

- Currently planned initial release is for Entity management and manual Form 731
  - Entities:
    - Grantee
    - Telecommunication Certification Bodies (TCBs)
    - TCB Designating Authorities (TDAs)
    - TCB Accrediting Bodies (TCBAs)
    - Test Firm Accrediting Bodies (TFABs)
    - Test Firms
  - Form 731 Application Programming Interface (API) not included in first phase.



# EAS Modernization – Remaining Major Phases

- Form 731 Application Programming Interface (API)
  - Will allow individual TCB databases to connect with FCC EAS to submit Form 731s electronically
- Market Surveillance Module
  - Will allow sample requests to be made by TCBs on FCC website
  - Will change annual surveillance report process
- Knowledge Database Inquiry and Publication Module
  - Replaces current KDB into new platform.
- Legacy EAS phase will not be publicly available when new EAS phase is implemented



# EAS Modernization – Status Update

## ● Status Update

- Production Date has not been determined yet
  - Dependent on User Acceptance Test (UAT) results
  - Work is continuing on parts of system development and resolution of defects
  - FCC is working within resource and budget limitations

## ● Go Live Date may be before next TCBC

- User training plans & documents under development

## ● UAT

- Internal started 5/28/2020 - End date TBD
- External first round started 6/26/2020-Ended 7/20/2020
  - Second external UAT round under consideration



# EAS Modernization – UAT Summary

## ● Test Group

- 39 External users volunteered to test the EAS
  - Diverse group of entity types with varying skill sets and work roles
  - FCC received about 200 emails on UAT issues
- About 12 FCC users tested internal and external functionality

## ● External user testing was limited:

- Limited recent production data in UAT environment
- Testing functionality for users with logins
- Testing within each users normal function
- Tested External user functionality only
  - FCC users tested internal and external processes
- General public access and webpage where not available for testing at the time.
  - FCC is currently testing general public access



# EAS Modernization – UAT Defect Summary

- Numerous programming defects identified that programming team is resolving
- Numerous transition issues identified that need to be mitigated prior to go live
  - Data conversion, User logins, etc
- Numerous training needs identified
  - Website text/help guidance clarifications
  - New EAS and existing EAS Process clarifications
  - New EAS and existing EAS Policy clarifications





# EAS Modernization – Summary of External Tester Comments

- Initial Issues Reported
  - Login/username process
  - FRN Association
  - Data not identical to production
  - New Look and feel/Learning curve
  - UAT Environment not identical to Production
  - Policy Changes incorporated into process
- Other issues
  - Program Software defects
  - Policy issues
  - Flow issues
  - Enhancement suggestions



# EAS Modernization – Most Reported Issues

## ● Defect Examples

- Surveillance report submissions
- Form 731 Tech Spec and Attachment carry forward for Permissive Changes and ID Changes
- Web Session Inactivity disconnects
- Form 731 menu population process

## ● Processes

- Declaration Attachment(s) required
- Form 731 validity checks: TCB/Test Firms/Tech Specs
- Minimal Click vs Confirm All groups
- Composite Applications-legacy vs new



# EAS Modernization – UAT Conclusions

- Good Feedback Received from Testers
- FCC is reviewing all feedback
  - Fixing defects
  - Reviewing enhancement requests with respect to policies, processes and costs
  - Determining what can and must be implemented
- Results give FCC direction to move forward
- Creating training materials and plan to address new EAS policies and existing EAS policies that testers didn't understand in UAT
- FCC needs to reach out to each user group and provide training prior to transition



# EAS Modernization – Work in Progress

- Programming teams to resolve outstanding defects
- FCC to retest defects and test end to end process
- Team and FCC identify all transition issues and document each step of deployment process
- FCC establish help desk and help guides
- FCC determine go live time period and process
  - FCC notify users of implementation plan, dates, and required actions
- FCC update KDB Publications related to new EAS
  - 45 Existing KDB updates plus any new KDBs
- FCC outreach to each entity group:
  - Make users aware of change and timeline
  - Train users for their specific roles and tasks
  - Encourage users to plan for transition



# Questions and Answers

**Thanks!**





**FOR REFERENCE:**

**EAS MODERNIZATION –  
POLICY AND SYSTEM CHANGE SUMMARY**



# EAS Modernization General Changes

- New platform has very different look and feel
  - Website URLs for new EAS will be different
  - All user access will be on the same landing page but based on which entity/entities a user is associated they will see different options
    - General public will see landing page with links but no pulldown menus
    - Users with no entity associations will see landing page with basic pulldown menu list and option to associate with entities
    - TCB user landing page will show Form 731 submission options and manage TCB options in addition to other current TCB functionality
  - Each user will be required to obtain their own login from FCC CORES
    - Current TCB shared logins (e.g. US9999) will no longer be login



# EAS Modernization General Changes (cont.)

- Information Visibility across entity
  - TCB Information
    - A Form 731 submitted by a TCB user will be visible to all other users at the same TCB
      - All users at the TCB that submitted Form 731 will be able perform the same functionality as the submitting TCB user
    - All users at TCB will be able to see and manage TCB information including contacts
- New EAS allows for multiple users to be associated with all entity types
  - Agents can be associated with Form 731s and Grantees
    - Agents need letter of agency from entity
    - Users/usernames that are not associated with an entity (either employee or agent) have general public viewing rights
- Each Entity is required to have at least one primary contact
- Entity Company Phone Number and Company Email Fields added



# EAS Modernization

## Non-Authenticated Users

- Non-Authenticated Users
  - Functionality for users without a login and password/username will be different from current EAS but capability will remain the same:
    - View KDB publications
    - Submit and add additional information to their own KDB inquiries
    - View Public information including:
      - Granted 731s
      - Approved Test Firms
      - Recognized TCBs
      - Grantees



# EAS Modernization

## Individual Username/Login Accounts

- Username
  - Each User will have their own username
    - Usernames based on email address and initially validated
  - Each entity must have at least one user with a valid username/login associated with their entity (TCBs need at least two to issue grant)
    - This will be a significant transition to associate all TCB users with a username and key employee roles
    - Any entity may have more than one associated username
- Step 1 - Usernames obtained at [www.fcc.gov/cores](http://www.fcc.gov/cores)
  - **Usernames can be obtained now at CORES site**
  - Usernames are managed by different group at FCC- Not OET
- Step 2 - Username must be associated with FCC Registration Number (FRN) to allow entity association with username
  - **FRN/Username association can be done now at CORES site**
  - All TCBs (and all other entities) already have an FRN
- Step 3 - Entity/Username association not available until Go Live





# EAS Modernization

## User Management Add & Remove

- EAS Username association/access to entity
  - Requested by each user under “New Filings” pulldown by clicking “Join an Entity”
  - An already approved entity user must validate the request
    - Validate under “Manage Filings” pulldown using link for “Pending Entity Access Requests”
  - TDAs or TCBAAs must validate TCB usernames and roles after join request before access to TCB information is granted
  - TFABs must validate test firm users after join request before access to Test Firm information is granted
- Removing username association with entity
  - If an employee leaves an entity the entity association with the username should be expired to prevent the employee from accessing entity privileged information
  - This can be done by any other employee associated with entity or an entity (TDA, TCBA) that oversees the entity (TCB)



# EAS Modernization TCB Entity User Access

- TCB individual user access
  - Get FCC Username
    - [www.fcc.gov/cores](http://www.fcc.gov/cores)
  - Associate username with TCB FRN
    - [www.fcc.gov/cores](http://www.fcc.gov/cores)
  - Associate username with TCB Entity
    - Link will be available on new OET EAS webpage
      - URL will be provided when it becomes available
    - Each TCB username shall be associated with TCB Key Employee Role that is validated by accreditation body



# EAS Modernization Grantee Processes

- New Grantee Codes will not be assigned until grantee code payment is received by FCC
  - Users will complete grantee form online and be provided with payment instructions on screen, by email and on dashboard.
  - Once the payment is received by FCC the new grantee code will be emailed and visible to logged in user on their dashboard
- New EAS allows for multiple users/username to be associated with each grantee
  - Agents can be associated with Grantees
  - A primary grantee contact that is not an agent must be provided to submit grantee code request
- Agents may obtain grantee code on behalf of grantee
  - TCB are allowed to get grantee codes on behalf of grantee. TCB should select agent checkbox and make themselves an agent contact for grantee



# EAS Modernization Grantee Processes (cont)

- Grantee code process changes
  - Grantee company phone number and company email fields have been added to the form.
    - These will be the grantee contact information shown to public on FCC website
      - » FCC will migrate current email address for Grantee to this field as part of conversion to new EAS.
  - New EAS Grantee Registration Form under “New Filings” menu.
  - Modify grantee information now accessed under “Manage Filings” pulldown “using link for “Manage My Entities”
    - A grantee user, a TCB user for the TCB that obtained the grantee code or a grantee agent (after association with grantee) may modify the grantee information
    - Transfer of Control and Company Name Change required information not changing





# EAS Modernization Form 731s Changes

- Pre Approval Guidance (PAG) submitted completely via 731 and not 731/KDB mix as currently done
- Form 731 updates and status change notification emails go out to all usernames added on Form 731 but not to all users at TCB
- New EAS allows for multiple TCB, Grantee, Test Firm and Agent contacts to be associated with Form 731
  - All contacts are required to have FCC username
  - If an agent is acting on behalf of the grantee for the equipment approval then the agent shall be identified on Form 731
    - Form 731 Agents need letter of agency from Grantee submitted with Form 731 as attachment





# EAS Modernization

## Form 731 Composite Filings

- Current EAS Composite Device Submissions
  - Each composite submitted on a different Form 731 and each composite equipment class has a unique Form 731 confirmation number
- New EAS Composite Device Submissions
  - Composite devices may be submitted on one Form 731 application by adding multiple equipment classes to the Technical Specifications/Line Entry 731 Tab
    - Equipment classes available are enabled by scope selection-i.e. select the scope(s) first on 731
    - One grant of certification covers entire application
  - New EAS will allow a new equipment class to be added with a permissive change filing



# EAS Modernization

## Form 731 FCCID Information Tab

- Select Application Purpose
  - Original Application, Class II PC, Change in FCCID, etc.
    - New application purpose added for combined “Change in FCCID & Class II Permissive Change”
  - Change in FCCIDs
    - New question regarding original FCCID grantee’s permission
      - Permission is required
- Grantee Selection
  - In grantee company name field enter either grantee company name or grantee code and select applicable name/grantee code from the list presented
- Product Code Entry
  - Enter product code to complete FCCID



# EAS Modernization

## Form 731 Applicant Information Tab

- Primary Grantee Contact
  - TCB must select grantee contact from list of existing grantee contacts to identify grantee user name that will be shown on the grant of certification
- New required question: "Is there US located representative for this device?"- Yes/No
  - A US representative is not required to complete a certification grant
- New required question: "Is there an agent associated with this application?" Yes/No
  - If yes is selected options an agent contact must be added
    - Upon saving an "+ Add Agent" button will appear
  - If yes is selected an agent authorization attachment is required
    - A new exhibit type has been added for these



# EAS Modernization

## Form 731 TCB Information and Scopes

- Select TCB
  - TCB name must be selected from pulldown menu
    - If username only associated with one TCB, only one option
- Select Scope
  - Select the scope(s) for the device being authorized
    - This is a multi-select
    - Only the scopes the TCB is recognized for will be available for selection
    - The scopes chosen enable the equipment classes that will be available when the technical specifications are entered
  - TCB Scopes changing from A1-A4, B1-B4 to 18 scopes similar to those of test firms. See KDB 974614 for list of current scopes
    - 17065 TCB scope and 17025 test firm scopes maintained separately
    - Migration of scopes will be applied by FCC at implementation
      - TCBs should validate new scopes when system becomes operational





# EAS Modernization

## Form 731 TCB Key Employees and Contacts

- New required questions about TCB process to specify:
  - TCB Certification Decision Maker(s)
    - This is a multi-select list
  - TCB Reviewer(s)
    - This is a multi-select list
  - TCB Evaluator(s)
    - This is a multi-select list
  - TCB Decision maker(s) and TCB Reviewer(s) cannot be the same person(s) as the evaluator(s)
- Multiple TCB usernames may be associated with a Form 731
  - All usernames specified on Form 731 get email when status changes or information updated
  - Any username associated with submitting TCB may view and take action on Form 731, as allowed by 731 status, even if the TCB user is not specified on Form 731





# EAS Modernization

## Form 731 Test Firm Information Tab

- Select Test firm Name
  - Test Firm must be FCC recognized for Scope of device
  - TCB required to identify Test Firm Contact for 731
- Additional Test Firm Selection Optional
  - If testing completed by more than one FCC Recognized test firm then additional test firms shall be identified on Form 731 and a test firm contact identified for each



# EAS Modernization Form 731 General Tab

- Hearing Aid Compatibility? Yes/No
  - If applicable select yes and upload required test report
- RF Exposure (pulldown selection)?
  - Answer selection determines if supporting attachment(s) required or optional
- Software Defined Radio? Yes/No
- Related KDB Inquiry? Enter KDB Inquiry Number(s)
- Modular (pulldown selection of modular types)?
- Waiver? Yes/No
- Product Description – Enter brief description
- Grant Comments – Enter Text to appear on Grant



# EAS Modernization

## Form 731 General Tab- Pre Approval Guidance (PAG)

- Pre-Approval Guidance (PAG) process in new EAS is initiated and completed in Form 731 Filing
  - A PAG is a request to approve Form 731
    - Testing guidance is a normal KDB inquiry
  - Enter by using “+Add PAG” button to specify applicable PAG Categories and then “Submit” to complete selection(s)
  - Process no longer initiated in KDB
  - Multiple PAG categories can apply to single Form 731
    - TCB should enter separate PAG for each applicable category and upload applicable supporting attachments
    - Multiple PAG applications can be assigned to different FCC PAG reviewers and processed in parallel



# EAS Modernization

## Form 731 General Tab- Pre Approval Guidance (PAG) II

### ● FCC PAG Types:

- TCB initiated PAG as required in KDB publication (388624) guidance
- FCC initiated – used to manage equipment authorization program
  - Automatically applied based on Form 731 selections
    - E.g.: equipment class, scope, rule part
  - Grant prohibited by system until FCC review complete
- If FCC sees increase in TCB's "forgetting" to apply PAG to granted application FCC could require all application from TCB to go through PAG process





# EAS Modernization

## Form 731 Technical Specifications Tab

- Radiated or Conducted Power Listed on Grant
  - New question for each transmitter technical specification asking if listed power was radiated or conducted measurement
- Required Fields
  - The required technical specifications fields have red asterisk \* to identify required fields. \* is dependent on the equipment class and rule part being entered so initial view only shows \* next to equipment class and rule part but \* fields may change upon equipment class entry
- + Add Technical Specifications
  - For button to add technical specification to be enabled the scope must be selected and Form 731 saved





# EAS Modernization Form 731 Process Changes

- Carry Over from previous application
  - New option to carry technical specifications over from original grant for Change in FCCID and Class II PC applications
- Scope Validity Checks
  - Minimum required Technical Specification fields entered
  - New validation added to ensure that all technical specifications/line entries on 731 are within the TCBs and Test Firms test firms scope of accreditation and maximum frequency capability



# EAS Modernization

## Form 731 New Exhibit Types

- Exhibit type changes
  - New Exhibit Types
    - Agent Authorization:
      - If an agent is identified on 731 a document from the Grantee indicating that the agent is authorized to act on their behalf is required
      - These attachments may not be held confidential
    - Declarations:
      - A declaration that the information provided to the FCC is true and correct (2.911(d)) and that the TCB has informed the grantee of their responsibilities (2.909) with regard to accepting the grant is required with every Form 731
        - » This is a new policy
      - These attachments may not be held confidential
      - This replaces the signature and current Form 731 declarations



# EAS Modernization

## Form 731 Exhibit Type Changes

- Exhibit type changes (continued)
  - New Exhibit Types
    - Pre-Approval Guidance (PAG)-Attachment that would have been submitted to the KDB in the existing EAS should be submitted to the PAG exhibit type
      - Proposed testing plans and other sensitive pre grant information should be submitted this exhibit type
        - » Upon PAG approval to grant, all applicable info to other exhibit types required (i.e. the final test report needs to be uploaded to the test report folder)
      - These attachments are always held confidential
  - Exhibit Type Name Change and Content Additions
    - Test Report exhibit type name changed to Test Report/HAC Test Report
      - A hearing aid compatibility (HAC) test report is only required if the rule parts the device operates under require HAC testing
      - These attachments may not be held confidential



# EAS Modernization

## Form 731 Exhibit Type Changes & File Sizes

- Exhibit type changes continued
  - Merged Exhibit Types
    - Attestation Statements and Cover Letter exhibit types merged into one exhibit type and Waiver information should also be included if applicable
      - These attachments may not be held confidential
    - Block Diagram, Schematic, Parts List-Tune Up Info, and Operational Description are merged into one exhibit type
      - This will allow all confidential information to be in one attachment
      - These attachments may be held confidential with justification
- Maximum Attachment Size
  - 25 MB/attachment (currently 6 MB/attachment)
  - No limit on number of 25 MB attachments or 731 total size
- Permissive Change and Change in FCCID Attachments
  - Carry non-confidential attachment over from original grant





# EAS Modernization

## Form 731 New 731 Buttons Pre Grant

### ● Pre-Grant Form 731 Button Options

- “Save” button allows content to be saved without validity checks
  - Must submit/apply validations prior to grant
  - Not granted Non PAG applications are deleted from system after 30 days
- “Submit”- When using the “+ add ...” buttons the submit button appears after “+ Add...” to save new information, the submit button is used to complete the specific information submission
  - Applies to: Contacts(agents), Technical Specifications, PAGs, Exhibits
- “Submit Form 731” button applies validity checks and if all checks met sends application to FCC and updates status
  - If PAG is applicable (either 731 initiated or FCC applied) the FCC reviewer will be notified to review the submission
  - If PAG not applicable the status will change to Logged In and the TCB can see options to preview grant and/or issue grant
    - New process flow doesn't currently require TCB to use preview grant but that flow is being modified
- “Cancel” button allows TCB to cancel an ungranted 731 filing
  - This will delete the application





# EAS Modernization

## Form 731 New 731 Buttons-Post Grant

### ● Post Grant Form 731 Button Options

- “Dismiss” button added – Available for 30 days from grant
  - Dismissal only permitted if device not marketed
  - Dismissal Reasons
    - Not in compliance with rules
    - Applicants request
  - EAS limits TCB Dismissals to applications that TCB granted
    - TCBs can't dismiss another TCBs grant of Certification
  - After 30 days from grant TCBs cannot Dismiss grants even if the application is in audit mode
- TCBs may update application and/or attachments for 30 days from grant date or if application is in audit mode
  - After 30 days TCBs need to request audit mode through KDB Inquiry
- TCBs may extend short term confidentiality (STC) prior to STC expiration up to STC limit